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10/553,101	10/17/2005	Arne B. Wallin	5146-06-14 (WALLIN-06.PCT)	2487
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Miltons IP/p.i. 225 Metcalfe Street Suite 700 Ottawa, ON K2P 1P9 CANADA			LAUX, JESSICA L.	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,101

Applicant(s)

WALLIN, ARNE B.

Examiner

JESSICA LAUX

Art Unit

3635

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-25 and 28-40 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/14/2010 has been entered.

Response to Amendment

The declaration under 37 CFR 1.132 filed 11/16/2010 is insufficient to overcome the rejection of the claims based upon 35 USC 103 as set forth in the last Office action because: the facts presented are not germane to the rejection at issue; and the showing is not commensurate in scope with the claims. Specifically, the declaration addresses how the prior art systems are used and how the finished product wall systems are built. The claims are drawn to an apparatus and not the method of making/using the apparatus. Additionally, the declaration alleges that since the combination was not obvious to the inventor it is therefore non-obvious under 35 USC 103. The question is not whether the combination was obvious to the patentee but whether the combination was obvious to a person with ordinary skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007).

As the declaration refer(s) only to the system described in the above referenced application and not to the individual claims of the application there is no showing that

the objective evidence of nonobviousness is commensurate in scope with the claims.

See MPEP § 716.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

Applicant's arguments filed 12/14/2010 have been fully considered but they are not persuasive.

Applicant's argument that Schultz does not disclose a vertical flange form having an interior volume is not persuasive as Schultz is not relied upon for this teaching. Rather the office relies upon Walling for teaching a wall with a vertical flange form having an interior volume. The previous office action does cite passages and members 19,31 to define a flange side of the wall portion of Schultz but does not supposed that those members are equivalent to applicant's claimed flange forms, again, Wallin is used for the teaching of that feature.

Applicant's argument that the combination of Wallin and Schultz does not disclose a footing form that remains with the wall portion as Schultz discloses a footing form that is removed is not persuasive. The office uses Schultz for the teaching of forming a footing continuous and simultaneously with a wall. Wallin discloses a wall portion having a flange forms attached and remaining with the wall portion. In view of Schultz's teaching that it is known to incorporate footing forms with wall forms for simultaneous forming, it would have been obvious at the time the invention was made to

modify the forms of Wallin to include a footing form that would remain with the wall as Wallin discloses forms that remain with the wall.

Applicant's arguments regarding how Wallin and Schultz fill the forms are not persuasive as the claims recited a functional or intended use of filling/forming with binder. The combination of Wallin view of Schultz is certainly capable of being filled in the claimed manner.

Applicant's arguments regarding claim 36 and Betzler are not persuasive as Betzler is not relied upon for teaching trough and footing forms filled in situ.

Applicant's arguments regarding claim 34 and House are not persuasive as House is not relied upon for teaching a footing form underlying the wall.

Applicant's arguments regarding claim 35 and Babcock are not persuasive as the claim does not recite a "single plate", rather the claim recites at least one positioning plate with upwardly bent flanges. House clearly discloses such a plate.

Applicant's arguments regarding claim 29 and Walstone are persuasive as Walstone is not relied upon for the teaching of the form but rather for the teaching of having a notched portion in a wall flange for accommodating a beam. Wallin is relied upon for teaching a wall portion with a flange form. It is the combination of Wallin (with Schultz) and Walstone that disclose the features of claim 29. Applicant's arguments are only directed to Walstone and therefore are not persuasive to overcome the rejection.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the multiple tiered wall

with the footing forms of the wall panels of the second building wall overlying the trough forms of the wall panels of the first tier of wall panels, as in claim 36, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 21 is objected to because of the following informalities: line 3 recites "the flange side" which last antecedent basis. The claim would read more clearly if it were changed to "a flange side" Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21-25,28,30-33,37-40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6244005 in view of Schultz.

Claims 21, 22. Wallin discloses a preformed wall panel having base and top ends and two vertical side edges for installation on a supporting surface, comprising:

a) a wall portion having a width and height and fitted on one side, a flange side, with a plurality of vertical flange forms (claim 1 section (a), 10) having an interior flange volume for forming a flange on the wall portion when filled with binder material. Wallin discloses a footing (claim 1 section (b)) but does not disclose how the footing was made/formed nor does Wallin expressly disclose a footing form as claimed.

Schultz discloses a wall portion having a footing form (9) for providing a footing volume to be filled with binder material, the footing form being positioned adjacent to the base end of the wall panel and extending across the width of the wall panel to the respective vertical side edges of the wall panel (as seen in figures 1-2), the footing form further being:

i) attached to and extending laterally away from the wall portion on a flange side of the wall portion (where the side comprising members 19, 31 would be considered a flange side) so as to remain with the wall portion in such orientation once the footing volume has been filled with binder material (as seen in the figures and noted throughout the disclosure);

iii) downwardly open but upwardly closed (as seen in figures 1-2) for covering and confining such binder material between the footing form, the flange side of the wall

portion and the supporting surface when the wall panel is installed on such supporting surface;

iv) open at the ends of the footing form that are adjacent to the respective vertical side edges of the wall panel (as seen in the figures and noted throughout the disclosure). Shultz further discloses two such portions be positioned adjacent each other.

At the time the invention was made it would have been an obvious matter of design choice to one of ordinary skill in the art to modify the wall panel of Wallin, including a footing, to have the footing formed by a footing form such as disclosed by Shultz so that it is attached to and positioned beneath and extending laterally from the flange forms to provide a wall assembly that is easy to construct; whereby the footing form can be filled with binder material that serves as a footing along the base end of the panel, interconnected, covered, footing volume to extend between two adjacent wall panels (where Schultz discloses that the footing form attached to and positioned lateral of the wall portion and is open to the interior of the wall portion to allow the binder material to flow from one to the other creating a continuous wall/footing assembly).

Claim 23. A wall panel as in claim 22 comprising a trough form (Wallin claims 6,9,10) mounted along the top end of the wall portion defining a trough volume that communicates with said flange volume for receiving binder material at the same time that the flange and footing forms are being filled with binder material.

Claim 24. A wall panel as in claim 23 comprising reinforcing couplings (Wallin claims 1,6-8) seated in and protruding from said wall portion into any one or more of

said flange or footing volumes, to position and support reinforcing rod (such as rod 24) to be placed within said one or more volumes in combination with reinforcing rod positioned within one or more of said one or more flange or footing volumes and supported by the reinforcing coupling means.

Claim 25. A wall panel as in claim 21 wherein said footing form has an outer edge (55 as seen in Shultz) remote from said wall portion which outer edge is positioned beneath the base of the wall portion when the wall portion is suspended in a vertical plane (as seen in for example figure 2), said footing form being made of a resilient material (where Shultz discloses sheet metal, which is the same material applicant discloses in the specification, where sheet metal has a resiliency) that will allow the outer edge to become aligned with variations in the supporting surface when the preformed wall panel is placed on such surface.

Claim 28. A wall panel as in claim 21 wherein the material for the flange and footing forms is of sheet material (as disclosed by both Shultz and Wallin claim 2) which is fastened by embedment into the panel wall portion of edges of the sheet material which sheet edges are interrupted from alignment in a straight line so as to reduce the tendency for cracks to proliferate in the wall portion (where at least Wallin at claims 1-5, disclose the claimed embedment, therefore the combination of the footing form of Shultz onto Wallin would also have the claimed embedment as disclosed by Wallin).

Claim 30. A building wall comprising a plurality of panels (Wallin claim 10) as in claim 21 mounted on the supporting surface to form the building wall with adjacent vertical side edges of the respective wall panels abutting each other, wherein the footing

forms of the respective panels are aligned to provide against said supporting surface a series of continuous, interconnected, covered footing volumes extending along the plurality of wall panels whereby the footing forms can be filled with a continuous volume of binder material that serves as the footing for the building wall (as noted above where both Wallin, claims 1,10,11 and Schultz disclose having adjacent members positioned for creating a continuous wall and where Schultz disclose having the footings positioned adjacent for having a continuous interconnected footing volume).

Claim 31. A building wall as in claim 30 wherein the panels comprise a trough form (claims 1,9,10) mounted along the top end of the wall portion defining a trough volume that communicates with said flange volume for receiving binder material at the same time that the flange and footing forms are being filled with binder material and wherein the wall panels define a closed perimeter building wall and the flange sides of the wall panels are inwardly directed into the interior of the wall perimeter (claims 1,9,10).

Claim 32. A building wall as in claim 31 comprising reinforcing couplings seated in and protruding from said wall portions into said footing volumes to position and support reinforcing rod to be placed within said volumes in combination with reinforcing means laid in the interconnected footing volumes bridging between adjacent footing volumes of adjacent wall panels to become embedded therein once the forms are filled with binder material, the reinforcing means being positioned and supported by the reinforcing couplings (as noted claims 1-8,10).

Claim 33. A building wall as in claim 32 having vertical half-flange forms (claims 10,11) mounted on said wall portions along the two vertical side edges of the wall portions, the outer edge of at least one of said half-flange forms having at least portions of its surface extending to overlap and permit coupling to an adjacent half flange form when two of said wall panels with half flange forms are abutted together, thereby defining a single, common flange form volume (as seen in figure 21).

Claims 37, 39. A wall panel as in claims 21 or 30 wherein the wall portion is made of concrete (where Wallin claims a binder material and it would have been obvious to one of ordinary skill in the art to use a concrete as the binder material as it is commonly used as a wall and foundation material).

Claims 38, 40. A wall panel as in claims 37 or 40 further comprising concrete as the binder material present in the flange and footing form volumes (where Wallin claims a binder material and it would have been obvious to one of ordinary skill in the art to use a concrete as the binder material as it is commonly used as a wall and foundation material).

Claim 36 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6244005 in view of Shultz (5511761), as presented above, and further in view of Betzler (1834892).

Claim 36. Wallin in view of Shultz discloses the building wall as in claim 30 as above wherein the wall panels comprise a trough form (claims 1,9,10) mounted along the top end of the wall portion defining a trough volume that communicates with said

flange form volumes for receiving binder material at the same time that the flange and footing forms are being filled with binder material; but Wallin in view of Schultz does not disclose that the wall panels serve as first and second tiers in a multiple tiered wall.

Betzler discloses a wall system where the wall is a multiple tier wall having a second panel overlying a first panel to form the tiers (as seen in the figures and noted throughout the disclosure).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall system of Wallin in view of Schultz to be a multiple tier wall system having one panel overlying another panel as disclosed by Betzler (where the footing form of the upper panel would overlie the trough form of the lower panel or where Wallin discloses a wall panel without a footing form attached that could overlie the bottom tier of Wallin in view of Schultz) to form a wall panel able to accommodate varying heights such as a two story building.

Claim 34 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6244005 in view of Shultz (5511761) and further in view of House (5588786).

Claim 34. Wallin in view of Schultz discloses the building wall as in claim 30 as above including vertical half-forms (30A) mounted along said abutting vertical side edges; but does not disclose two adjacent wall panels meet at an angle and further comprise a corner piece having vertical faces shaped to abut the vertical side edges of adjacent wall panels; and further comprising a joiner piece for joining said respective half-forms.

House discloses a wall panel system having multiple adjacent wall panels with flange forms having vertical half forms, where the adjacent wall panels meet at an angle forming a corner and further having corner pieces (88,108) that abut the vertical side edges of adjacent wall panels and further comprise a joiner piece (112) where the corner pieces, joiner piece and half flange form define a vertical cavity (as seen in figure 7).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall system of Wallin in view of Schultz to include the corner construction such as disclosed by House resulting in a wall construction having the corner piece, vertical side edges of adjacent wall panels, vertical half-forms and joiner piece defining a vertical cavity that communicates with the footing volume for receiving binder material to provide a wall assembly that forms various shapes and designs making it versatile for use in building structures having multiple angled walls.

Claim 35 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6244005 in view of Shultz and further in view of House (5588786) and further still in view of Babcock (6256960).

Claim 35. Wallin in view of Shultz and further in view of House disclose the building wall as in claim 34 as above but does not disclose at least one positioning plate with upwardly bent plate flanges for positioning beneath and aligning said corner piece, said plate flanges embracing portions of the base ends of said respective abutting wall panels.

Babcock discloses a building wall assembly having at least one positioning plate (13) with upwardly bent plate flanges (16) for positioning beneath and aligning the wall parts (Col. 5).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the invention of Wallin in view of Shultz and further in view of House to include the positioning plate as disclosed by Babcock to assist in the placement of the wall and corner pieces thereby reducing misalignment.

Claim 29 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6244005 in view of Shultz and further in view of Walston (4512126).

Claim 29. Wallin in view of Shultz disclose the wall panel as in claim 24 as above but do not disclose a beam support post form as claimed.

It is notoriously common and well known in the art to have wall panel post notched to accommodate attachment of a beam. For example, Walston disclose a wall panel having a beam support post (generally at 8 of figure 3 and noted at) fitted to said wall portion, said beam support post being notched at its upper end (at 22 of figure 3), below the top end of the wall panel, to receive the end of a beam (34).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall panel and forms of Wallin in view of Shultz to have a beam support post form having a notched portion for forming a support post for supporting a beam allowing the wall structure to be incorporated with additional structure in the building to provide a secure and strong building able to resist forces.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the footing forms of the second tier wall panels overly the trough of the first tier, is the second tier offset from the first tier, this is not described in the specification or drawings.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 36 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose a second tier having a footing form overlying a trough of the first tier. Instead the specification at page 21 discloses a second tier that does not include a foot form and simply sits on the upper beam of the first tier.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-25,28, 30-33,37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin (6244005) in view of Schultz (5511761).

Claims 21, 22. Wallin discloses a preformed wall panel having base and top ends and two vertical side edges for installation on a supporting surface, comprising:

a) a wall portion (1) having a width and height and fitted on one side, a flange side, with a plurality of vertical flange forms (30; see at least figures 17, 18, 21) having an interior flange volume (31) for forming a flange on the wall portion when filled with binder material. Wallin discloses a footing but does not disclose how the footing was made/formed nor does Wallin expressly disclose a footing form as claimed, but does disclose two such panel positioned adjacent each other.

Schultz discloses a wall portion having a footing form (9) for providing a footing volume to be filled with binder material, the footing form being positioned adjacent to the base end of the wall panel and extending across the width of the wall panel to the respective vertical side edges of the wall panel (as seen in figures 1-2), the footing form further being:

i) attached to and extending laterally away from the wall portion on a flange side of the wall portion (where the side comprising members 19, 31 would be considered a flange side) so as to remain with the wall portion in such orientation once the footing volume has been filled with binder material (as seen in the figures and noted throughout the disclosure);

iii) downwardly open but upwardly closed (as seen in figures 1-2) for covering and confining such binder material between the footing form, the flange side of the wall portion and the supporting surface when the wall panel is installed on such supporting surface;

iv) open at the ends of the footing form that are adjacent to the respective vertical side edges of the wall panel (as seen in the figures and noted throughout the disclosure). Shultz further discloses two such portions be positioned adjacent each other.

At the time the invention was made it would have been an obvious matter of design choice to one of ordinary skill in the art to modify the wall panel of Wallin, including a footing, to have the footing formed by a footing form such as disclosed by Shultz so that it is attached to and positioned beneath and extending laterally from the flange forms to provide a wall assembly that is easy to construct; whereby the footing form can be filled with binder material that serves as a footing along the base end of the panel, interconnected, covered, footing volume to extend between two adjacent wall panels (where Schultz discloses that the footing form attached to and positioned lateral of the wall portion and is open to the interior of the wall portion to allow the binder material to flow from one to the other creating a continuous wall/footing assembly).

Claim 23. A wall panel as in claim 22 comprising a trough form (10, 17, or 32 of Wallin) mounted along the top end of the wall portion defining a trough volume that communicates with said flange volume for receiving binder material at the same time that the flange and footing forms are being filled with binder material.

Claim 24. A wall panel as in claim 23 comprising reinforcing couplings (6,7,8) seated in and protruding from said wall portion into any one or more of said flange or footing volumes (as seen in the figures and noted at least at Col. 4, lines 3-12), to position and support reinforcing rod (such as rod 24) to be placed within said one or more volumes in combination with reinforcing rod positioned within one or more of said one or more flange or footing volumes and supported by the reinforcing coupling means.

Claim 25. A wall panel as in claim 21 wherein said footing form has an outer edge (55 as seen in Shultz) remote from said wall portion which outer edge is positioned beneath the base of the wall portion when the wall portion is suspended in a vertical plane (as seen in for example figure 2), said footing form being made of a resilient material (where Shultz discloses sheet metal, which is the same material applicant discloses in the specification, where sheet metal has a resiliency) that will allow the outer edge to become aligned with variations in the supporting surface when the preformed wall panel is placed on such surface.

Claim 28. A wall panel as in claim 21 wherein the material for the flange and footing forms is of sheet material (as disclosed by both Shultz and Wallin) which is fastened by embedment into the panel wall portion of edges of the sheet material which sheet edges are interrupted from alignment in a straight line so as to reduce the tendency for cracks to proliferate in the wall portion (where at least Wallin disclose the claimed embedment, therefore the combination of the footing form of Shultz onto Wallin would also have the claimed embedment as disclosed by Wallin).

Claim 30. A building wall comprising a plurality of panels as in claim 21 mounted on the supporting surface to form the building wall with adjacent vertical side edges of the respective wall panels abutting each other, wherein the footing forms of the respective panels are aligned to provide against said supporting surface a series of continuous, interconnected, covered footing volumes extending along the plurality of wall panels whereby the footing forms can be filled with a continuous volume of binder material that serves as the footing for the building wall (as noted above where both Wallin and Schultz disclose having adjacent members positioned for creating a continuous wall and where Schultz disclose having the footings positioned adjacent for having a continuous interconnected footing volume).

Claim 31. A building wall as in claim 30 wherein the panels comprise a trough form (10,17 or 32) mounted along the top end of the wall portion defining a trough volume that communicates with said flange volume for receiving binder material at the same time that the flange and footing forms are being filled with binder material and wherein the wall panels define a closed perimeter building wall and the flange sides of the wall panels are inwardly directed into the interior of the wall perimeter (as noted throughout the disclosure of Wallin).

Claim 32. A building wall as in claim 31 comprising reinforcing couplings (8) seated in and protruding from said wall portions into said footing volumes to position and support reinforcing rod to be placed within said volumes in combination with reinforcing means laid in the interconnected footing volumes bridging between adjacent footing volumes of adjacent wall panels to become embedded therein once the forms

are filled with binder material, the reinforcing means being positioned and supported by the reinforcing couplings (as noted in the drawings and throughout the disclosure).

Claim 33. A building wall as in claim 32 having vertical half-flange forms (30A) mounted on said wall portions along the two vertical side edges of the wall portions, the outer edge of at least one of said half-flange forms having at least portions of its surface extending to overlap and permit coupling to an adjacent half flange form when two of said wall panels with half flange forms are abutted together, thereby defining a single, common flange form volume (as seen in figure 21).

Claims 37, 39. A wall panel as in claims 21 or 30 wherein the wall portion is made of concrete (Col. 3, lines 65-66 of Wallin).

Claims 38, 40. A wall panel as in claims 37 or 40 further comprising concrete as the binder material present in the flange and footing form volumes (Col. 3, lines 65-66 of Wallin).

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin (6244005) in view of Shultz (5511761) and further in view of Betzler (1834892).

Claim 36 (as best understood). Wallin in view of Shultz discloses the building wall as in claim 30 wherein the wall panels comprise a trough form (10,17 or 32) mounted along the top end of the wall portion defining a trough volume that communicates with said flange form volumes for receiving binder material at the same time that the flange and footing forms are being filled with binder material (as noted

throughout the disclosure of Wallin); but Wallin in view of Shultz does not disclose that the wall panels serve as first and second tiers in a multiple tiered wall.

Betzler discloses a wall system where the wall is a multiple tier wall having a second panel overlying a first panel to form the tiers (as seen in the figures and noted throughout the disclosure).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall system of Wallin in view of Shultz to be a multiple tier wall system having one panel overlying another panel as disclosed by Betzler (where the footing form of the upper panel would overlie the trough form of the lower panel or where Wallin discloses a wall panel without a footing form attached that could overlie the bottom tier of Wallin in view of Schultz) to form a wall panel able to accommodate varying heights such as a two story building.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin (6244005) in view of Shultz (5511761) and further in view of House (5588786).

Claim 34. Wallin in view of Schultz discloses the building wall as in claim 30 as above including vertical half-forms (30A) mounted along said abutting vertical side edges; but does not disclose two adjacent wall panels meet at an angle and further comprise a corner piece having vertical faces shaped to abut the vertical side edges of adjacent wall panels; and further comprising a joiner piece for joining said respective half-forms.

House discloses a wall panel system having multiple adjacent wall panels with flange forms having vertical half forms, where the adjacent wall panels meet at an angle forming a corner and further having corner pieces (88,108) that abut the vertical side edges of adjacent wall panels and further comprise a joiner piece (112) where the corner pieces, joiner piece and half flange form define a vertical cavity (as seen in figure 7).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall system of Wallin in view of Schultz to include the corner construction such as disclosed by House resulting in a wall construction having the corner piece, vertical side edges of adjacent wall panels, vertical half-forms and joiner piece defining a vertical cavity that communicates with the footing volume for receiving binder material to provide a wall assembly that forms various shapes and designs making it versatile for use in building structures having multiple angled walls.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin in view of Shultz and further in view of House (5588786) and further still in view of Babcock (6256960).

Claim 35. Wallin in view of Shultz and further in view of House disclose the building wall as in claim 34 but does not disclose at least one positioning plate with upwardly bent plate flanges for positioning beneath and aligning said corner piece, said plate flanges embracing portions of the base ends of said respective abutting wall panels.

Babcock discloses a building wall assembly having at least one positioning plate (13) with upwardly bent plate flanges (16) for positioning beneath and aligning the wall parts (Col. 5).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the invention of Wallin in view of Shultz and further in view of House to include the positioning plate as disclosed by Babcock to assist in the placement of the wall and corner pieces thereby reducing misalignment.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin in view of Shultz and further in view of Walston (4512126).

Claim 29. Wallin in view of Shultz disclose the wall panel as in claim 24 but do not disclose a beam support post form as claimed.

It is notoriously common and well known in the art to have wall panel post notched to accommodate attachment of a beam. For example, Walston disclose a wall panel having a beam support post (generally at 8 of figure 3 and noted at) fitted to said wall portion, said beam support post being notched at its upper end (at 22 of figure 3), below the top end of the wall panel, to receive the end of a beam (34).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the wall panel and forms of Wallin in view of Shultz to have a beam support post form having a notched portion for forming a support post for supporting a beam allowing the wall structure to be incorporated with additional structure in the building to provide a secure and strong building able to resist forces.

Allowable Subject Matter

Claims 26,27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA LAUX whose telephone number is (571)272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eileen Lillis/
Supervisory Patent Examiner,
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/J. L./
Examiner, Art Unit 3635